

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | O. FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------------------------|----------------|------------|----------------------|-------------------------|-------------------------|--|
| 09/519,327 03/06/2 | | 3/06/2000 | Upendra V. Chaudhari | YOR-2000-0006 | 8814 | |
| 35195 | 7590 | 06/14/2004 | | EXAMINER | | |
| FERENCE | | CIATES | ARMSTRONG, ANGELA A | | | |
| 400 BROAD STREET PITTSBURGH, PA 15143 | | | | ART UNIT | PAPER NUMBER | |
| | · | • | | 2654 | | |
| | | | | DATE MAILED: 06/14/2004 | DATE MAILED: 06/14/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applica | n(s) | | | | |
|---|---|--|---|--|--|--|--|
| | 09/519,327 | CHAUD | HARI ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Angela A. Armst | | | | | | |
| The MAILING DATE of this communication appeared for Reply | ppears on the cove | sheet with the correspon | dence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | I. 1.136(a). In no event, howe pply within the statutory mir d will apply and will expire ute, cause the application to | ever, may a reply be timely filed imum of thirty (30) days will be cons SIX (6) MONTHS from the mailing d b become ABANDONED (35 U.S.C. | sidered timely. late of this communication. . § 133). | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on <u>05</u> | March 2004. | | | | | | |
| • | nis action is non-fina | al. | | | | | |
| , | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4) ☐ Claim(s) 3-11 and 14-23 is/are pending in the 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 3-11 and 14-23 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and | awn from consider | | | | | | |
| Application Papers | | | | | | | |
| 9)☐ The specification is objected to by the Examir | ner. | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ ac | D)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the corre | · | | • • | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list | nts have been rece nts have been rece iority documents ha au (PCT Rule 17.2 | ived. ived in Application No ave been received in this (a)). | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) 🗌 | Interview Summary (PTO-413) | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date | | Paper No(s)/Mail Date Notice of Informal Patent Applic Other: | cation (PTO-152) | | | | |

Application/Control Number: 09/519,327 Page 2

Art Unit: 2654

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U. S. C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U. S. C. 103 (c) and potential 35 U. S. C. 102(e), (f) or (g) prior art under 35 U. S. C. 103(a).
- 3. Claims 3-11 and 14-23 are rejected under 35 U.S. C. 103(a) as being unpatentable over Picone et al (US Patent No. 5,293,452) in view of Setlur et al (US Patent No. 5,717,826) in further view of O'Shaughnessy (Speech Communication: Human and Machine, 1987).
- 4. As per claims 3-6, 14-17, and 23, Picone et al disclose an apparatus for verifying verbal utterances comprising:
- a target password generator which generates at least one target password, (see col. 4, lines 43-51);

:_

Art Unit: 2654

an acceptance arrangement, which compares a verbal utterance to at least one target password, (see col. 4, lines 58-62, and Fig. 1, item 30).

Picone et al fail to explicitly teach a system comprising an arrangement, which compares text based on a verbal utterance to at least one target password sentence. However, this feature is well known in the art.

In a similar field of endeavor, Setlur et al discloses a voice verification system comprising arrangement, which compares text based on a verbal utterance to at least one target password sentence (see col. 2, lines 64-66 and col.3, lines 4-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Setlur et al teachings of acceptance/rejection arrangement in the Picone et al system, for the purpose of allowing for reliable and secure automatic access to restricted system such as remote databases while reducing verification error rate, as suggested by Setlur.

Picone fails to specifically teach the decoder being adapted to transform a verbal utterance into decoded text via employing the finite state grammar to modify the verbal utterance. However, transforming a verbal utterance into decoded text via employing the finite state grammar to modify the verbal utterance was well known in the art.

In a similar field of endeavor, at page 468-470, O'Shaughnessy teaches networks for speech recognition implementing dynamic programming, an acoustic analyzer to generate a segment string which is used by other systems to refine or modify the string until a text sentence is ready to be output.

Application/Control Number: 09/519,327

Art Unit: 2654

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the utterance verification system of Picone to implement the grammar network system as taught by O'Shaughnessy, for the purpose of providing efficient and accurate recognition and improved utterance verification.

As per claims 7 and 18, Picone et al disclose a system wherein said target password generator is adapted to accept prompted text corresponding to at least one password, (see col. 4, lines 36-51).

As per claims 8 and 19, Picone et al disclose a system wherein said target password generator is adapted to automatically generates at least one password as a baseform that is derived form an acoustic enrollment, (see col. 2, lines 9-10; col. 4, lines 36-51).

As per claims 9-11, 20-22, Picone et al disclose a system wherein said acceptance arrangement is adapted to derive a match score based on comparing. (see Fig. 1, "scores").

Response to Arguments

5. Applicant's arguments filed March 5, 2004 have been fully considered but they are not persuasive.

Applicant argues the teachings of Setlur are different than the comparing of a verbal utterance and a target password on a text level of the present invention. The Examiner disagrees and argues Setlur specifically teaches that a string-based test is performed such that the spoken string is compared for verification and the string is either accepted or rejected (col.3, lines 7-8).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the

Application/Control Number: 09/519,327 Page 5

Art Unit: 2654

teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Setlur teaches a voice verification system comprising arrangement, which compares text based on a verbal utterance to at least one target password sentence for the purpose of reducing verification error rate. Additionally, O'Shaughnessy implements an acoustic analyzer to generate a segment string which is used by other systems to refine or modify the string until a text sentence is ready to be output for the purpose of raising recognition accuracy.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 09/519,327

Art Unit: 2654

Page 6

7. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258.

The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A. Armstrong

Examiner

Art Unit 2654

AAA

June 7, 2004

RICHEMOND DORVIL

SUPERVISORY PATENT EXAMINER